

Letter from Alexander Graham Bell to Alexander Melville Bell, Eliza Symonds Bell, Carrie Bell, Charles Bell, April 1874, with transcript

Salem Boston — Mass. Wednesday, April — 1874. Dear Papa, Mamma, Carrie & Charlie,

I sent you copies of the various Papers containing notices of my first Public Lecture from which you will see that it was a grand success. The attendance was not large — probably a trifle over 400 — but the finest minds in Boston were there. I had little opportunity of speaking of the Uses of the system as Time was so short. After the lecture a little knot of about 20 people remained who plied me with questions on various points.

Dr. Runckle, President of the Society, was one — and the result has been that I have an invitation to give a Second Lecture before the Society — and the President promises me a full house . The lecture has at once placed me in a new position in Boston. It has brought me in contact with the scientific minds of the city .

I have been given free access to the Institute of Technology — and permission to experiment with Helmholtz' apparatus and with Scott and Koenig's "Phonautograph" and Revolving Mirror apparatus.

It so happens that the next Lecture before the Society is on the subject of the Vowel Sounds as written 2 by Koenig's apparatus. I have been invited to assist in preparing plates for exhibition. I am to sound your scale of vowels, and the curves as written on a smoked piece of glass will be thrown on the screen by means of the Limelight.

The method of revolving Mirrors will I think afford a very delicate means of analyzing speech-sounds.

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A hole is cut in a gas-pipe and over it is stretched a thin membrane, represented in dotted lines. A tube leads from this with a mouth piece just like Mamma's tube. If you sing into the tube the membrane is set in vibration — and affects the gas-jet. The flame dances up and down so many hundred times per second just as the membrane vibrates. The motion is rendered sensible to the eye, by means of four mirrors placed on the circumference of a wheel. On turning the wheel rapidly — the reflecting of the flame appears as a broad band of light the height of the flame. Every motion of the flame is pictured as a wave of light. Each different vowel and consonant presents a different appearance in the mirror.

3

The vowel presents the appearance of waves the shape of the teeth of a saw. If is sounded, the teeth become notched . A most beautiful kind of lace-work pattern results from . I can give you no idea of the exceeding beauty of this lovely pattern.

gave a similar network of a blue light surmounted by blobs of crimson light at regular intervals.

I go to the Institute this afternoon to make some experiments .

I have been unable to write before this as I had — after the lecture — to prepare the 4th number of the Pioneer.

The Institutions have agreed to the expense of forwarding the manuscript — and it is already proving a grand success. The fourth number has been very little labor to me — and the others promise to be self-supporting. I have received within the last week, — 80 pages (!) of matter written in Visible Speech — from the pupils and teachers of the Boston School and the Clarke Institution. The First Number of the Pioneer reached Hartford 4 on Monday — and now I may expect contributions from the American Asylum.

Altogether there is every chance of its turning out a grand success.

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With all my hard work I am able to say — thanks to good Mrs. Sanders — that I am in excellent health. Of course I still have the usual headaches after lectures or excitement — but on the whole I am in splendid physique. I am sorry that I have been unable to go home at this time. The Boston Schools have had a weeks holidays — and I could have given myself a weeks rest. I felt however that I could not afford a journey home at the present time — and so continued at work. I have been successful in every other way than pecuniarily . As I have to pay Miss Locke — I have been only paying expenses so far.

Little George and his sister are down with the measles just now.

George was taken unwell on the very day I wanted his assistance. I had to hunt up Mr. Goldsmith to supply his place — and he read his speech without any preparation to speak of. Poor Miss Locke was quite mortified by her failure to “ whistle ”. She could have done so . Her first attempt resulted in merely and as the audience took it up at once with a burst of applause — I did not think it necessary to make a 5 second attempt. The reporters however mentioned it — and Miss Locke vows she will whistle next time !!!

My success in lecturing has shown me the importance of impromptu speaking .

I always succeed best when I have least written matter to rely upon.

A manuscript makes me nervous. Is it not strange? I find I can talk perfectly freely to a large audience when I could not say anything to half-a-dozen people .

I do not understand it at all. The Boston D. Advertiser sent down to me the day before the lecture, asking for the woodcuts which illustrated the pamphlet on “The Nature and Uses of V.S.” These however are at present at Hartford illustrating an article in some encyclopedia.

The Editor told me that he had received a letter from Edward Atkinson advising him to report my lecture in full . The Editor said that the New York Tribune was in the habit of reporting Scientific lectures and giving illustrations — and he did not see why the

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Advertiser should not do so also. I told the Editor that if he would get the illustrations copied — I would pay the Engraver's bill.

They accordingly sent down and had the whole 6 thing executed the day before. I am writing this on a table in the Smoking-Car — so you must not wonder if my sentences may appear a little outree.

I shall return Mr. Niven's letter to you this week. I have saved one dozen copies of the Advertiser for you. Please send me the names of any people you would wish to send it to and, if I have not already done so — I shall forward. I sent one directed to "George Coats Esq., Paisle."

I have sent off 110 copies. Sorry your incubator was a failure.

Love to all and everyone.

Your affectionate Aleck. Prof. A. M. Bell, Brantford, Ont. Note: Original in pencil.